APPARATUS AND METHOD FOR IDENTIFYING OBJECTS USING SOCIAL LINKS

TECHNOLOGICAL FIELD

[0001] Example embodiments of the present invention relate generally to facilitating the identification of objects connected to a network, such as the Internet of Things.

BACKGROUND

[0002] As more and more objects are becoming "smart," the idea of a globally interconnected network of devices, objects, and things (sometimes called the Internet of Things) is moving closer to becoming a reality. From cellular phones to motion sensors, lamps to refrigerators, pollution sensors to shoes, every object that exists can potentially be assigned a unique identifier and can be configured to communicate with other devices via a network. As the number of "smart" objects grows, however, so too does the burden on a user to identify a particular object belonging to the user himself or to some other user for gaining access to that object.

BRIEF SUMMARY OF EXAMPLE EMBODIMENTS

[0003] Accordingly, it may be desirable to provide tools that allow users to easily and intuitively discover and access other "smart" objects using social links. Embodiments of an apparatus, method, and computer program product are thus described that can identify an object that is connected to a network using a social link between a user of a device and a party who is related to the user, where the party is the owner of the object. In this way, embodiments of the invention are configured to leverage an explicit or implicit social network of individuals and the devices or objects they control.

[0004] In some embodiments, an apparatus may be provided that includes at least one processor and at least one memory including computer program code. The at least one memory and the computer program code may be configured to, with the processor, cause the apparatus to at least access a social link associated with a user of a device, identify an object via the social link, where the object is connected to a network, and provide for presentation of an indication of the object on a display of the device.

[0005] The at least one memory and the computer program code may be configured to, with the processor, cause the apparatus to access the social link automatically in response to the user's execution of a third party application. Alternatively or additionally, the at least one memory and the computer program code may be configured to, with the processor, cause the apparatus to access the social link via a social networking interface. The at least one memory and the computer program code may be configured to, with the processor, cause the apparatus to identify the object by determining a party related to the user via the social link and identifying at least one object associated with the party. In some cases, the at least one memory and the computer program code may be configured to, with the processor, cause the apparatus to identify the object by determining whether access control information associated with the object allows for access of the object by the user of the device.

[0006] In some embodiments, the at least one memory and the computer program code may be configured to, with the processor, cause the apparatus to provide for presentation of the indication by providing for presentation of a visual representation of the object. Alternatively or additionally, the at least one memory and the computer program code may be configured to, with the processor, cause the apparatus to provide for presentation of the indication by providing for presentation of data associated with the object. Moreover, the at least one memory and the computer program code may be configured to, with the processor, cause the apparatus to provide for presentation of the indication by enabling control of the object by the user of the device. The at least one memory and the computer program code may be configured to, with the processor, cause the apparatus to receive data associated with the object in response to receipt of user input via the indication presented in some cases.

[0007] In other embodiments, a method and a computer program product are described for accessing a social link associated with a user of a device; identifying an object via the social link, wherein the object is connected to a network; and providing for presentation of an indication of the object on a display of the device. In some cases, the social link may be accessed automatically in response to the user's execution of a third party application or via a social networking interface. Moreover, a determination of whether access control information associated with the object allows for access of the object by the user of the device may be made. Additionally or alternatively, the method and computer program product may provide for presentation of at least one of a visual representation of the object or data associated with the object. In some cases, control of the object by the user of the device may be enabled, and/or data associated with the object may be received in response to receipt of user input via the indication presented.

[0008] In still other embodiments, an apparatus is described for identifying objects based on a social context of the object. The apparatus includes means for accessing a social link associated with a user of a device; means for identifying an object via the social link, wherein the object is connected to a network; and means for providing for presentation of an indication of the object on a display of the device.

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S)

[0009] Having thus described example embodiments of the invention in general terms, reference will now be made to the accompanying drawings, which are not necessarily drawn to scale, and wherein:

[0010] FIG. **1** illustrates one example of a communication system according to an example embodiment of the present invention;

[0011] FIG. **2** illustrates a schematic block diagram of an apparatus for identifying objects accessible to a user via the user's social links according to an example embodiment of the present invention;

[0012] FIG. **3** illustrates a system for identifying objects accessible to a user via the user's social links according to an example embodiment of the present invention;

[0013] FIG. **4** illustrates a schematic block diagram of an object according to an example embodiment of the present invention;

[0014] FIG. **5** illustrates a schematic block diagram of a device according to an example embodiment of the present invention;